

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for adaptively adjusting an eService management system by using feedback control, comprising:

distributing behavior expert objects at different levels of a hierarchy of an eService management system;

performing, within the hierarchy, feed-forward reasoning from lower level behavior experts to higher level behavior experts;

comparing the performance of ~~these~~ the behavior experts with various objective functions;

identifying bottlenecks by back-propogating the objective function; and

using comparison discrepancies to adjust the system.

2. (Currently amended) A system ~~is described~~ that adaptively adjusts an eService management system by using feedback control, comprising:

means for distributing behavior expert objects at different levels of a hierarchy of an eService management system;

means for performing, within the hierarchy, feed-forward reasoning from lower level behavior experts to higher level behavior experts;

means for comparing the performance of these behavior experts with various objective functions; means for identifying bottlenecks by back-~~propagating~~ propagating the objective function; and

means for using comparison discrepancies to adjust the system.

3. (New) A system for adaptively controlling an eService management system, comprising:

a plurality of behavior experts, hierarchically distributed throughout an infrastructure of the eService management system, wherein each behavior expert monitors and controls a particular aspect of an infrastructure according to an objective function; and

a plurality of data providers which provide the behavior experts with observed data for a particular aspect of the infrastructure.

4. (New) The system as claimed in claim 3, wherein each behavior expert comprises:
adjustable control parameters; and
a set of one or more objective functions pertaining to the aspect of the infrastructure monitored and controlled by the behavior expert.

5. (New) The system as claimed in claim 4, wherein each behavior expert in the hierarchical distribution is assigned a priority.

6. (New) The system as claimed in claim 5, wherein the control parameters of a given behavior expert within the hierarchy are dynamically adjusted by a behavior expert assigned a higher priority, and a given behavior expert within the hierarchy adjusts the control parameters of a behavior expert assigned a lower priority.

7. (New) The system as claimed in claim 6, wherein a given behavior expert within the hierarchy receives observed data from one or more data providers and zero or more behavior experts assigned a lower priority.

8. (New) The system as claimed in claim 5, wherein the assignment of priority is dynamic.

9. (New) The system as claimed in claim 3, wherein the observed data includes one of the following: stock transactions, database transactions, and memory usage by an application.

10. (New) The system as claimed in claim 7, wherein adaptive feedback control is initiated by any given behavior expert within the hierarchy, depending on the optimal scope of control within the infrastructure.

11. (New) A system for adaptively controlling an eService management system, comprising:

a plurality of behavior experts, hierarchically distributed throughout an infrastructure of the eService business, wherein each behavior expert monitors and controls a particular aspect of an infrastructure according to an objective function;

a plurality of data providers that provide the behavior experts with observed data for a particular aspect of the infrastructure; and

a dispatcher that relays information from the behavior experts to a global repository.

12. (New) The system as claimed in claim 11, wherein each behavior expert comprises:
adjustable control parameters; and
a set of one or more objective functions pertaining to the aspect of the infrastructure monitored and controlled by the behavior expert.

13. (New) The system as claimed in claim 12, wherein each behavior expert in the distribution is assigned a priority.

14. (New) The system as claimed in claim 13, wherein the control parameters of a given behavior expert within the hierarchy are dynamically adjusted by a behavior expert assigned a higher priority, and a given behavior expert within the hierarchy adjusts the control parameters of a behavior expert assigned a lower priority.

15. (New) The system as claimed in claim 14, wherein a given behavior expert within the hierarchy receives observed data from one or more data providers and zero or more behavior experts assigned a lower priority.

16. (New) The system as claimed in claim 13, wherein the assignment of priority is dynamic.

17. (New) The system as claimed in claim 11, wherein the observed data includes one of the following: stock transactions, database transactions, and memory usage by an application.

18. (New) The system as claimed in claim 15, wherein adaptive feedback control is initiated by any given behavior expert within the hierarchy, depending on the optimal scope of control within the infrastructure.

19. (New) The system as claimed in claim 11, wherein each behavior expert sends information directly to the dispatcher depending on the following:

the discrepancy between the observed data received by the behavior expert and the objective function; and

the severity of the discrepancy.

20. (New) The system as claimed in claim 19, wherein the severity of the discrepancy is adjustable to moderate the flow of information from the behavior expert to the dispatcher.